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Chief Patent Counsel
Engelhard Corporation
101 Wood Avenue
Iselin, NJ 08830-0770

EXAMINER

SAMPLE, DAVID R

| ART UNIT | PAPER NUMBER |
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1755

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731,722

Applicant(s)

TRAN ET AL.

Examiner

David Sample

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 26-63 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 and 42-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20040311;20040621
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-7 and 42-52 drawn to a metal promoted, steamed zeolite and method of making, classified in class 502, subclass 74.
- II. Claims 8-15 and 53-62, drawn to a rare earth containing zeolite and method of making, classified in class 502, subclass 73.
- III. Claims 26-41, drawn to a zeolite having a specific FTIR peak, classified in class 423, subclass 700.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II and III are directed to related products. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants.

See MPEP § 806.05(j). In the instant case, the inventions as claimed have a materially different design in that the zeolites relate to materials that have materially different structures.

Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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During a telephone conversation with Richard Negin on September 22, 2006 a provisional election was made with traverse to prosecute the invention of Group III, claims 26-41. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-15, and 42-62 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Objections

Claims 27 and 36 are objected to because of the following informalities:

In claim 27, line 5, "Δ" should be "Å".

In claim 36, line 5, "Δ" should be "Å".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 26, 29, 31, 35, 39 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Mohamed et al. ("Redox Behavior of Copper Mordenite Zeolite," *Journal of Materials Science*, 30 (1995) 4834-4838).

Mohamed et al. two mordenite zeolites: one containing sodium, and one containing copper. See the abstract. The sodium containing zeolite has an FT-IR peak at 3780 cm^{-1} . See page 4836, first column, paragraph under the heading "3.2 Hydroxyl groups region."¹

In reaching the conclusion that the zeolite of Mohamed et al. anticipates the present claims, the word "stabilized" and the phrase "metal-promoted" had to be interpreted. In interpreting claims, the Patent Office gives words and phrases their "broadest reasonable interpretation," and the claims must be given their plain meaning in the absence of a definition in the specification. See MPEP 2111. The specification does not provide definitions for "stabilized" or "metal-promoted."

As to "stabilized," the specification implies that the presence of the FTIR band at 3781 cm^{-1} indicates a zeolite that is stable. See the abstract. Mohamed et al. discloses such a zeolite.

The plain meaning of "metal-promoted" is that the zeolite contains a metal. Mohamed et al. discloses such a zeolite when the reference discloses that the zeolite contains sodium.

The peak area recited in claim 35 can be found in the reference in Figure 2.

Claims 35-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Creighton et al. ("Stereoselective Meerwein-Ponndorf-Verley and Oppenauer Reactions Catalyzed by Zeolite BEA," *Journal of Molecular Catalysis A: Chemical*, 115 (1997) 457-472.

Creyghton et al. discloses a zeolite beta having an FTIR peak at 3780 cm^{-1} and which has a peak area of greater than 0.05. See page 467, Table 4.

Double Patenting

Claims 26-41 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-25 of U.S. Patent No. 6,914,026 B. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '026 patent relate to an iron promoted zeolite which is a species of the presently claimed genus. The species anticipates the genus, and anticipation is the ultimate in obviousness.

Claims 26-41 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,689,709 B. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '709 patent relate to an iron promoted zeolite which is a species of the presently claimed genus. The species anticipates the genus, and anticipation is the ultimate in obviousness.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined

¹ It is noted that Mohamed et al. discloses a copper mordenite zeolite that has an FTIR band at 3787 cm^{-1} . See page 4836, second column, first full paragraph. This zeolite is NOT relied upon for anticipating the present claims as the 3787 cm^{-1} band is outside the claimed range.

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application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Conclusion

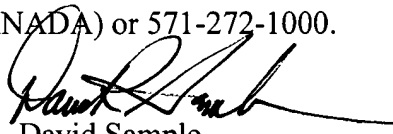
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (571)272-1376. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (572)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "David Sample", is written over a horizontal line.

David Sample
Primary Examiner
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